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## **A. SCOPE OF THE REPORT**

The Railway Safety Directive (EC) 49/2004, Art.18, states that:

Each year the safety authority shall publish an annual report concerning its activities in the preceding year and send it to the Agency by 30 September at the latest.

The report shall contain information on:

- the development of railway safety, including an aggregation at Member State level of the common safety indicators (CSIs) laid down in Annex I;
- important changes in legislation and regulation concerning railway safety;
- the development of safety certification and safety authorisation;
- results of and experience relating to the supervision of infrastructure managers and railway undertakings.

## **B. INTRODUCTORY SECTION**

### **B.1. 1. Introduction to the report**

The Railway Safety Commission (RSC) is the National Safety Authority for railway safety in Ireland. This is the first annual report from the RSC to the European Railway Agency (ERA). Further information may be found in the RSC's annual report for 2006 and our Statement of Strategy 2006-2008, published on our web-site [www.rsc.ie](http://www.rsc.ie).

This report specifically covers the process of safety regulation of the interoperable Irish railway network. This network has a track gauge of 1602mm. It is interoperable with the railway system in Northern Ireland, which falls under the jurisdiction of the United Kingdom.

### **B.2. 2. Railway Structure Information (Annex A)**

#### **- Network map**

A copy of the railway network map is shown in Annex A.1.

#### **- List of Railway Undertakings and Infrastructure Managers**

Details of the infrastructure manager and the principal railway operator are shown in Annex A.2. Iarnród Éireann is the infrastructure manager of the interoperable railway network in Ireland. Iarnród Éireann is also the principal operator on the railway network. It jointly operates a regular service, between Dublin and Belfast in Northern Ireland, in partnership with NIR-Translink. Otherwise, the only guest operator is a heritage railway society, the Railway Preservation Society of Ireland, whose trains are driven by Iarnród Éireann drivers.

### **B.3. 3. Summary – General Trend Analysis**

#### **- Development of railway safety**

The national network is low density and relatively lightly used. Even so, traffic intensity has increased by 66% since the year 2000. This trend is set to continue: the new timetable introduced at the end of the year 2006 features a clock-face timetable, with hourly services on the main double-tracked lines. Even so, the number of serious and significant accidents is low.

The safety of the railway network has been improved through the railway safety investment programme, initiated in 1999.

#### **- Safety certification**

The railways companies already have an established safety management system, which is being explained and formalised through their railway safety cases. These railway safety cases were submitted to the RSC for approval in June 2006 so as to achieve safety certification in 2007.

Safety certification of operators and safety authorization of infrastructure managers is dependent on a demonstration of their safety management system through a safety case.

### **B.4. The Safety Directive –**

#### **- Stage of implementation**

The major part of the safety directive was implemented in the year 2006 by giving effect to the Railway Safety Act, 2005.

- **National basis of implementation,**

The Railway Safety Act 2005 is primary legislation. It has been implemented in stages during the course of the year 2006, by means of statutory instruments designed to give effect to the various sections of the Act.

- **Fulfilment of voluntary elements;**

The Railway Safety Act 2005 effectively covers all railways with the exception of industrial railways, and the road/rail interfaces and passenger operations on industrial railways.

- **Applicable national legislation**

The Railway Safety Act 2005 and associated regulations are designed to provide a unified approach to railway safety regulation, and to apply the principles of the Railway Safety Directive.

## **C. ORGANISATION**

### **C.1. 1. Introduction to the organisation**

The RSC mission statement, as presented in our Statement of Strategy 2006-2008, is that:

“The Commission will assure, through education, guidance and balanced regulation, the safety of railway services and affected persons.”

The RSC was established in January 2006. This meets the Railway Safety Directive requirement that member states create national railway safety authorities. The Directive requires the causal investigation of railway accidents to be functionally separate from safety regulation. To this end, the Railway Safety Act 2005 permits establishment of an Accident Investigation Unit within the RSC, with shared administration but independent staffing and reporting arrangements.

We are a small, professional organisation with a flat reporting structure. This structure encourages and facilitates free-flow of information and ideas, which promotes consultation and creative thinking. This complements our purpose of promoting excellence in railway safety. It also provides us with the flexibility we need to respond effectively to immediate and unpredictable work demands, and to accomplish the structured tasks within our business plan.

Our budget for the year 2006 was €1.7m. Based on medium term workload projections made in 2002, we have approval for nine full-time staff, of which seven are technical and two administrative. This includes the Commissioner and the Chief Investigator, who are appointed by the Minister for Transport.

The position of Chief Investigator was not filled in 2006 even though the recruitment process was initiated in 2005. On 1st May 2006, a temporary contractual arrangement was entered into with a suitably experienced and qualified person.

The Railway Safety Directive specifies, in loss and injury terms, a minimum threshold above which investigation is mandatory. No such incidents occurred in 2006 and no direct investigations were initiated by the Unit. The Act provides for RSC oversight of internal railway undertaking investigations. In 2006 the Temporary Chief Investigator requested the designation of an RSC inspector to monitor two Iarnród Éireann investigations into a shunting incident at Cork Kent station and a derailment at Island Bridge. Neither of these investigations were been concluded in 2006.

The organizational chart for the RSC is shown in Annex B.1.

### **C.2. Organisational flow – relationship diagram**

A chart showing the flow and relationships between the NSAs and other national bodies may be seen in Annex B.2 of this report.



## D. THE DEVELOPMENT OF RAILWAY SAFETY

### D.1. Initiatives to maintain/improve safety performances

#### D.1.1. Safety measures triggered by accidents/precursors to these

Under Ministerial direction, an inquiry under the 1871 Railway Regulation Act was carried out into the derailment of a cement train on the Cahir Viaduct in 2003. The report of this inquiry was published in early 2006. The safety measures detailed in table D.1.1 were recommended as a result:

	Date	Place	Description of the event
<b>Accidents/precursors which triggered the measure</b>	07/10/2003	Cahir	Derailment of freight train on bridge over river, causing collapse of bridge deck
<b>Safety measures decided</b>			
1. IÉ should conduct a review of its safety management system to identify all areas where design, inspection and maintenance procedures are not fully developed and documented, and should establish a programme to develop and implement the necessary specifications and standards prioritised on the basis of safety risk. The content and structure of each specification or standard should reflect the safety criticality of the various elements of the associated procedure or physical asset.			
2. For remaining way-beam structures IÉ should review all available drawings and design documentation to identify, in so far as is practicable, variances from the original designs, and ensure that any safety implications are fully understood and that associated safety risks are reduced to as low as reasonably practicable.			
3. IÉ should review the derailment containment arrangements on its various structures and make whatever modifications might be required to ensure that they are fit for purpose and capable of preventing disproportionate failure.			
4. In parallel with, and pending implementation of Recommendations 2 and 3, IÉ should periodically review and amend as necessary the safety measures implemented at structures similar to the Viaduct to ensure that operational safety risk is reduced to as low as reasonably practicable.			
5. The training needs analysis conducted by IÉ on foot of the IRMS recommendation should be reviewed and, as necessary extended to include all staff involved in safety critical work. Where necessary new training plans should be introduced or existing plans modified or enhanced.			
6. IÉ should implement a strategy that ensures that its ongoing track monitoring requirements are effectively met, particularly in the short term pending upgrading of the EM50 track recording vehicle.			
7. In developing a strategy for upgrading the EM50 track recording			

vehicle IÉ should ensure that all available technologies for monitoring track condition are fully assessed and the specified functionality reflects the best combination of available technologies.
8. IÉ should review, and amend as necessary, its asset management systems to ensure that data is pertinent, comprehensive, concise and accessible and provides evidence that all outstanding issues are appropriately actioned and closed out.
9. IÉ should ensure that, pending full implementation and validation of new data management systems including those currently in course of development, comprehensive and up to date records of infrastructure asset inspection and maintenance are maintained and that relevant data is effectively promulgated to inspectors, maintainers and managers.
10. Provision is being made in the proposed Railway Safety Programme 2004-2008, for the establishment of internal IÉ auditing procedures. As with the overall safety development programme, IÉ should ensure that the introduction of these procedures is risk based with auditing introduced first in those areas presenting that greatest safety risk.
11 IÉ should review the performance characteristics of two-axle bulk cement wagons within the context of their wagon and track maintenance limits, to determine the extent to which these maintenance limits and maximum permitted speeds are mutually compatible and to propose practical solutions if necessary.
12 IÉ should review and amend as necessary its arrangements for monitoring adherence to both permanent and temporary maximum train speed limits, through a combination of line-side measurement and interrogation of in-cab recorded data, to ensure that they are appropriate in the context of current driving practice.
13 The functionality of the Teloc equipment currently in use by IÉ should be assessed, and modified as necessary, to ensure that it provides the level of access to data necessary for effective day to day safety management.
14. Not applicable.
15 IÉ should review its existing communications systems and take whatever action is necessary to ensure that on all parts of system train drivers are provided with an effective means of communication with the controlling signalman.

**Table D.1. 1 - Safety measures triggered by accidents/precursors to these**

### **D.1.2. Safety measures with other triggers**

The railway safety investment programme stems from the need to address the significant deficiencies in the Iarnród Éireann railway system identified in an independent review conducted in 1998. 2006 was the eighth year of the programme.

In 2005, the RSC commissioned a review when it was considered that sufficient progress had been made in addressing systemic safety deficiencies identified in previous reviews of railway safety in Ireland. The report was published in July 2006 and the RSC performed a follow-up audit late in 2006. Both can be viewed on our web-site: [www.rsc.ie](http://www.rsc.ie).

Recommendations were addressed to the Railway Safety Commission, to the Department of Transport and to Iarnród Éireann. These are outlined in Table D.1.2.

<b><i>Safety measures decided</i></b>	<b><i>Functional area</i></b>
Improve staff field time	Railway Safety Commission RSC1
Fill senior vacancies	RSC2
Review implications of relocation	RSC3
Increase pro-activity of Commission	RSC4
Agree criteria for reporting accidents and incidents	RSC5
Maintain effective challenge of Network Risk Model	RSC6
Reissue safety case guidelines	RSC7
Improve understanding of risk model	Department of Transport DOT1
Recruit a railway professional	DOT2
Review budgets for Part A and Part C projects	Safety Management SMS1
Maintain progress on Railway Safety Programme	SMS2
Review and update company standards	SMS3
Review management of company standards	SMS4
Document control	SMS5
Clarify briefing process for new/updated standards	SMS6
Improve safety briefings	SMS7
Development of technical standards (infrastructure)	SMS8
Implement Standard 2 (Safety monitoring) across all departments	SMS9
Workshop on trends from implementing monitoring standard	SMS10
Update and implement Standard 4 reporting of accidents/incidents	SMS11
Better define the future accident and incident investigation process	SMS12
Provide systematic training and coaching in investigation skills	SMS13
Strengthen the audit team and process	SMS14
Clarify safety responsibilities	SMS15
Specify communication requirements	SMS16
Develop guidance notes and monitor use of method statements	SMS17
Railway safety case should first focus on ground level compliance	Railway Safety Compliance CL1
Drugs and alcohol policy	CL2
Raise awareness of confidential incident reporting system (CARA)	CL3
Recording of "near-misses"	CL4
Development of Network Risk Model	Railway Network Risk Model NRM1
Develop in-house competence in Risk Model	NRM2
Review asset rating guidance	NRM3

Review mobile phone use guidelines	Railway Operations O1
Improve safety statements by making them specific to location	O2
Re-brief staff on requirement to use safety diaries	O3
Review the number of trainers in the Railway Training School	O4
Secure training attendance	O5
Address consequential vacancies	O6
Review, monitor and audit Track Safety Coordinator role	Railway Permanent Way PW1
Accident records should log first aid	PW2
Review the frequency of track inspections	PW3
Finalise preparation of new and revised standards and 'roll out'	PW4
Standards training programme	Railway Structures S1
Programme of thorough inspections of bridges and viaducts	S2
Flood scour management system	S3
Review outside party work/risks	S4
Provision of lookouts for track workers	Railway Standards ST1
Issue maintenance standards	ST2
Develop and formalise signalling fault system	ST3
Inspection and maintenance records system	ST4
Gap analysis of high level documents	Railway Rolling Stock RS1
Review methodology for approvals	RS2
Working party for EU Directives	RS3
Depot management of safety instructions and drawings	RS4
Review meeting structure and remits	RS5
Protocol for depot safety meetings	RS6
Training strategy	RS7
Change management	RS8
Train borne faults	RS9
Management of safety related defects	RS10
Implement new OCS ETR standards	Railway Electrical E1
Improved reporting of OCS & traction faults	E2
Develop processes for private subcontractors/third parties	E3
Clearer remits for future plant procurement	E4
Provide safe access to Fairview sidings	E5
Introduce earthing equipment management system	E6

**Table D.1. 2 Safety measures with other triggers**

## **D.2. Detailed data trend analysis**

This paragraph should contain the analysis of trends related to all categories of CSIs:

As this is the first annual report to the ERA, no detailed trend analysis is provided. However, to initialize this approach, significant accident data for the years 2002-2006 has been averaged and may be viewed in Annex C.1.1. These data are normalized in Annex C.1.2.

1. Number of accidents;

In 2006, ten accidents of significance were reported, of which eight occurred in suspicious circumstances.

2. Collisions, derailments, level crossing incidents, fires in rolling stock, etc;

A train was in collision with cattle, resulting in damage costing €750000;

A locomotive was driven into a freight wagon in a siding, causing the locomotive to be written off.

3. Number of fatalities;

Seven people died in separate incidents, in suspicious circumstances

4. Number of injuries;

One person was seriously injured, in suspicious circumstances

5. Number of precursors to accidents;

Precursors are reported for 2006 in Table D.2.1:

Broken rails	8
Track buckles	5
Wrong-side signal failures	4
Signals Passed at Danger (including shunting signals)	35
Broken wheels	0
Broken axles	0

**Table D.2. 1: Precursor incidents**

6. Cost of all accidents, hours worked on safety

Cost of accidents: These data are not available.

Percentage of hours worked lost due to accidents: These data are not available.

7. Technical safety of infrastructure and its implementation, management of safety

Percentage of track with ATP: 5%

Percentage of train-km using operational ATP systems: 12%

Total level crossings: 1688

LCs per line-km: 1.14

LCs with automatic or manual protection: 17% of total

Internal audits planned by IMs and RUs: 20

Internal audits accomplished: 21

## **E. IMPORTANT CHANGES IN LEGISLATION AND REGULATION**

The major part of the safety directive was implemented in the year 2006 by giving effect to the Railway Safety Act, 2005. The Railway Safety Act 2005 is primary legislation. It has been implemented in stages during the course of the year 2006, by means of statutory instruments designed to give effect to the various sections of the Act. Details of these statutory instruments are included in annex D.

Remaining provisions of the safety directive to be implemented will be introduced by way of regulations drafted during 2007.

## **F. THE DEVELOPMENT OF SAFETY CERTIFICATION AND AUTHORISATION**

### **F.1. National legislation – starting dates – availability**

#### **1.1. Starting date for issuing Safety Certificates according to Article 10 of Directive 2004/49/EC (if necessary, distinguish between Part A and Part B)**

The railway undertakings already have an established safety management system, which is being explained and formalised through their railway safety cases. These railway safety cases were submitted to the RSC for approval on 31<sup>st</sup> October 2006 so as to achieve safety certification in 2007.

#### **1.2. Starting date for issuing Safety Authorisations according to Article 11 of Directive 2004/49/EC:**

The railways infrastructure manager already has an established safety management system, which is being explained and formalised through their railway safety cases. The railway safety case was submitted to the RSC for approval on 31<sup>st</sup> October 2006 so as to achieve safety authorisation in 2007.

#### **1.3. Availability of national safety rules or other relevant national legislation to Railway Undertakings and Infrastructure Managers (website, paper documentation on request, etc.)**

National legislation dating from 1922 onwards is published by the Government Publications Office and may be downloaded from the website <http://www.irishstatutebook.ie>. Older legislation is not currently in publication, but copies of Public Acts may be obtained from the Department of Transport on request.

### **F.2. Numerical data (Annex E)**

The progress of the safety certification and safety authorisation process is indicated in Annex E.

### **F.3. Procedural aspects**

#### **F.3.1. Safety Certificates Part A**

##### **3.1.1. Reasons for updating/amending Part A Certificates (e.g. variation in type of service, extent of traffic, size of company)**

No safety certificates were issued in the year 2006. The process of updating safety certification in regard to new rolling stock is described in section F.4 below.

##### **3.1.2. Main reasons if the mean issuing time for Part A Certificates (restricted to these mentioned in Annex E and after having received all necessary information), was more than the 4 months foreseen in Article 12(1) of the Safety Directive**

No safety certificates were issued in the year 2006. The deadline for submission of the safety case by existing operators for the purpose of safety certification was 1<sup>st</sup> November 2006.

Subject to receipt of sufficient information and clarification as outlined in s.46 of the Railway Safety Act, the RSC must process each application within 3 months.

3.1.3. Overview of the requests from other National Safety Authorities to verify/access information relating the Part A Certificate of a Railway Undertaking that has been certified in your country, but applies for a Part B certificate in the other Member State

No requests of this nature were received in the year 2006.

3.1.4. Summary of problems with the mutual acceptance of the Community wide valid Part A Certificate

No safety certificates were issued in the year 2006.

3.1.5. NSA Charging fee for issuing a Part A Certificate (Yes/No – Cost)

A fee may be payable to the Minister, based on the cost of processing the request (see SI no. 643 of 2004 giving effect to Council Directive 2001/14/EC)

3.1.6. Summary of the problems with using the harmonised formats for Part A Certificates, specifically in relation to the categories for type and extent of service

No safety certificates were issued in the year 2006.

3.1.7. Summary of the common problems/difficulties for the NSA in application procedures for Part A Certificates.

None.

3.1.8. Summary of the problems mentioned by Railway Undertakings when applying for a Part A Certificate

None.

3.1.9. Feedback procedure (e.g. questionnaire) that allows Railway Undertakings to express their opinion on issuing procedures/practices or to file complaints

Railway Undertakings are facilitated through published guidance on safety cases, and through direct meetings with the RSC. The practice of the RSC is to facilitate applications as much as possible. The Railway Undertaking may appeal first to the RSC and further to the High Court should they be refused safety certification.

### **F.3.2. Safety Certificates Part B**

3.2.1. Reasons for updating/amending Part B Certificates (e.g. variation in type of service, extent of traffic, lines to be operated, type of rolling stock, category of staff, etc.)

No safety certificates were updated or amended in year 2006.

3.2.2. Main reasons if the mean issuing time for Part B Certificates (restricted to these mentioned in Annex E and after having received all necessary information), was more than the 4 months foreseen in Article 12(1) of the Safety Directive

No safety certificates were issued in the year 2006. The deadline for submission of the safety case by existing operators for the purpose of safety certification was 1<sup>st</sup> November 2006.

Subject to receipt of sufficient information and clarification as outlined in s.46 of the Railway Safety Act, the RSC must process each application within 3 months.

Any acceptance of Rolling Stock for operation will serve as an amendment to the Part B Certificate.

3.2.3. NSA Charging fee for issuing a Part B Certificate (Yes/No – Cost)



A fee may be payable to the Minister, based on the cost of processing the request (see SI no. 643 of 2004 giving effect to Council Directive 2001/14/EC)

3.2.4. Summary of the problems with using the harmonised formats for Part B Certificates, specifically in relation to the categories for type and extent of service

No safety certificates were issued in the year 2006.

3.2.5. Summary of the common problems/difficulties for the NSA in application procedures for Part B Certificates.

None.

3.2.6. Summary of the problems mentioned by Railway Undertakings when applying for a Part B Certificate

None.

3.2.7 Feedback procedure (e.g. questionnaire) that allows Railway Undertakings to express their opinion on issuing procedures/practices or to file complaints

Railway Undertakings are facilitated through published guidance on safety cases, and through direct meetings with the RSC.

### **F.3.3. Safety Authorisations**

3.3.1. Reasons for updating/amending Safety Authorisations

The process of updating safety authorisations in regard to new works is described in section F.4 below.

3.3.2. Main reasons if the mean issuing time for Safety Authorisations (restricted to these mentioned in Annex E and after having received all necessary information), was more than the 4 months foreseen in Article 12(1) of the Safety Directive

The deadline for submission of the safety case by existing infrastructure managers for the purpose of safety authorisation was 1<sup>st</sup> November 2006.

Subject to receipt of sufficient information and clarification as outlined in s.46 of the Railway Safety Act, the RSC must process each application within 3 months.

Any acceptance of New Works will serve as an amendment to the Safety Authorisation.

3.3.3. Summary of the regularly problems/difficulties in application procedures for Safety Authorisations

None.

3.3.4. Summary of the problems mentioned by Infrastructure Managers when applying for a Safety Authorisation

None.

3.3.5. Feedback procedure (e.g. questionnaire) that allows Infrastructure Managers to express their opinion on issuing procedures/practices or to file complaints

Infrastructure managers are facilitated through published guidance on safety cases, and through direct meetings with the RSC. The practice of the RSC is to facilitate applications as much as possible. The infrastructure manager may appeal first to the RSC and further to the High Court should they be refused safety authorisation.

### 3.3.6. NSA Charging fee for issuing a Safety Authorisation (Yes/No – Cost)

None charged in 2006.

## **F.4. Safety Approval of Rolling Stock and Infrastructure**

The process of updating safety certificates in regard to new rolling stock and safety authorisations in regard to new works is described below:

An infrastructure manager may not commence construction, installation or assembly of new works, and a railway undertaking may not bring into operation new rolling stock, until it has submitted a safety assessment and the RSC has approved this by way of a formal communication. Under the Railway Safety Act, the RSC is expected to issue this communication within 28 days, either accepting the safety assessment or setting out its reasons for not doing so.

To ensure that the process of approval of new works (infrastructure and rolling stock) is as smooth and effective as possible, we operate on a phased basis, granting approvals at various key project milestones. For infrastructure works there are three stages of approval, i.e., preliminary design, detailed design and prior to service or operation. In relation to rolling stock there are five stages of approval. i.e., concept, preliminary design, detailed design, testing and commissioning and passenger service/operations.

The RSC is expected to issue a communication within 28 days, either accepting the safety assessment or setting out its reasons for not doing so, e.g., a request for further information. This deadline is almost always met. The onus is therefore on the infrastructure manager or railway undertaking to submit sufficient and appropriate information to allow safety approval of new works and new rolling stock by the RSC.

During 2006 our approvals work involved twenty-six heavy rail and three light rail projects. Twenty-seven interim approvals were issued and five projects fully signed off for operation. Assessment of four rolling-stock projects, three heavy rail and one light rail, was ongoing through the year.

The main problem is a lack of inspectors within the RSC. In 2006, the process of safety approvals accounted for 34% of inspectors' time. The deadlines for approval of new works and new rolling stock have been met but, as a consequence, the level of audit and inspection has been lower than expected.

## **G. SUPERVISION OF RAILWAY UNDERTAKINGS AND INFRASTRUCTURE MANAGERS**

### **G.1. Description of the supervision of RUs and IMs**

#### **G.1.1. - Audits/inspections carried out by the NSA staff/third parties/both**

The RSC auditing and monitoring activities derive from four principal sources:

- Complaints and representations by, or on behalf of, passengers;
- Industry safety concerns, typically arising from accidents and incidents;
- The need to ensure that railway undertakings are implementing their approved safety cases;
- The need for ongoing assessment of the performance of all industry safety duty holders.

The RSC generally conducts inspections in response to representations or reports of incidents. Unannounced inspections are also performed.

The RSC also endeavours to perform planned coordinated audits of features of the railway system giving rise to concern. In 2006, two planned audits were performed to determine the level of compliance by level crossing users and to ascertain levels of overcrowding on trains.

As mentioned in section D.1 of this report, consultants delivered a comprehensive review of railway safety in June 2006, and the RSC performed one follow-up audit on aspects of the report relating to a railway undertaking and infrastructure manager.

#### **G.1.2. - NSA manpower available for audits (Number, % of NSA staff involved)**

The RSC has nobody dedicated to safety audits. These are done by the 5 inspectors as part of their general duties. In 2006, safety audit and inspections (not associated with safety authorisation or certification) accounted for about 10% of inspectors' time.

#### **G.1.3. - Economical aspects of audits (Costs,...)**

The RSC currently bears the costs of its own audits.

### **G.2. Submission of all IM and RU annual safety reports by the legal deadline according to Article 9(4) Safety Directive**

Safety Directive (EC) 49/2004 :

Art.9, '' Each year all infrastructure managers and railway undertakings shall submit to the safety authority before 30 June an annual safety report concerning the preceding calendar year. The safety report shall contain:

- information on how the organisation's corporate safety targets are met and the results of safety plans;
- the development of national safety indicators, and of the CSIs laid down in Annex I, as far as it is relevant to the reporting organisation;
- the results of internal safety auditing;
- observations on deficiencies and malfunctions of railway operations and infrastructure management that might be relevant for the safety authority.''

Article 9 of the Safety Directive is not yet implemented in Irish Law, so the necessary information is provided to the RSC through existing reporting mechanisms.

The annual report of the integrated principal railway undertaking and infrastructure manager, Iarnrod Eireann, is outlined below :

## **G.2.1. Safety Targets and Safety Plans**

### **G.2.1.1. Organisation's Corporate Safety Targets 2006**

The organisation's corporate safety targets are met through a number of programmes. In summary, between the Railway Safety Programme 2004 – 2008, 'Review of Railway Safety' recommendations, Network Wide Risk Model and the Enterprise Wide Risk Model there are the order of 156 safety initiatives leading to in excess of 455 actions. These are focusing on improving the soft side increasing management control i.e. improving structures, standards, systems, training, equipment and special initiatives for improving competency and, in particular, reduction of SPADS, shunting incidents.

### **G.2.1.2. Railway Safety Programme 2004 – 2008**

Parts A and C of the programme focus on improvements of the company's Safety Management System (A) and Human Performance Development (C) over a range of 51 projects. Special attention and detailed updating of key and slow moving projects and reporting to the DoT has led to good progress being made during 2006 on these programmes. The majority of these projects have reached maturity and are either in place or well progressed towards implementation. In particular, auditing and competency assessment is now taking place at all levels.

### **G.2.1.3. Review of Railway Safety Recommendations**

A review of Railway Safety and of the role and function of the RSC and the Department of Transport was delivered in June 2006. 58 recommendations made to Iarnród Éireann have been collated and progressed with the relevant owners. The Railway Safety Commission has audited a number of these. Updates of progress take place on a quarterly basis.

## **G.2.2. Safety Indicators**

### **G.2.2.1. Network Wide Risk Model**

The 2005 re-run of the model was completed and the findings were issued. There has been a reduction in risk level from 17.5 to 11.3 Risk Factor due to improvements in the model (issues log), improved asset ratings, timetable and rolling stock changes, and improved performance in incident data. It was also noted that IE should consider the implications for risk of increased train frequencies. The findings were tested through the Safety Case, Risk Communication Workshop and benchmarked against the Enterprise Wide Risk Model.

The AD Little Level Crossing Risk Model was reviewed and General Level Crossing Risk Model was built. This aligned to the NWRM. It is currently being rated and will be integrated into NWRM in 2007.

### **G.2.2.2. Enterprise Wide Risk Model**

The EWRM was restructured in 2006. The Enterprise Wide Risk Model Workshop involving IE managers was run in September. Thirty four risks which were prioritised as super critical or critical and specific actions with risk owners were identified. Progress on these is progressed on a quarterly basis.

The safety risks identified within the EWRM were benchmarked with those identified by the NWRM and it was found that both systems concur. The actions from the RSP, AD Little recommendations and NWRM have been cross-referenced and collated.

### **G.2.3. Safety Management System and Safety Audit**

#### **G.2.3.1. Safety Case progress report end of 2006**

Iarnrod Eireann submitted their first safety case to the Railway Safety Commission on the 31<sup>st</sup> October 2006 as required by the 2005 Railway Safety Act.

The case was developed over a number of years by a combination of staff at the Safety and Security Department and Line Management.

Discussions were held with the Railway Safety Commission prior to producing a draft document for circulation to ensure that an agreed way forward was developed.

In January 2006, the first draft of the case was circulated to Line Management. This document was in essence a roadmap to Iarnrod Eireann's Safety Management System.

Comments and suggested improvements gathered during briefings, meeting and workshops were incorporated into the final version submitted to the Railway Safety Commission in October 2006.

The Commission then commenced their 3 month acceptance process for the Safety Case which would be completed in January 2007.

#### **G.2.3.2. Safety Audit**

In 2006 the audit unit had a target to conduct 20 audits. The unit carry out a total of 21 audits.

The unit carries out a number of different types of audit. One of these audit types is specifically designed for personnel and locations (PAL). 13 PAL audits were carried out, 9 at stations, 3 in Permanent Way Inspectors Divisions and 1 at the building maintenance unit in Cork.

4 audits were carried out on Railway Safety Standards (RSS). These were RSS 2 Checking the Speed of Trains, Crossings RSS 12, Signal Cabins RSS 14, Heuston SER – General Rules and Regulations and RSS 14.

1 audit was carried out at the CME dept and 2 in-cab audits were carried out.

The audit results were communicated to the Line Management responsible for carrying out the opportunities for improvement.

### **G.2.4. Particular Risks**

No report was received on observations on deficiencies and malfunctions of railway operations and infrastructure management that might be relevant for the safety authority.

**G.3. Number of inspections of RUs/IMs for 2006**

		Inspections concerning Safety Certificates Part A (days)	Inspections concerning Safety Certificates Part B (days)	Inspections concerning Safety Authorisations (days)	Other Inspections (days)
	planned				
	carried out			26	54

**G.4. Number of audits of RUs/IMs for 2006**

		Audits of Safety Certificates Part A	Audits of Safety Certificates Part B	Audits of Safety Authorisations	Other Audits
	planned				
	carried out				3

**G.5. Summary of the relevant corrective measures/actions**

The process of safety certification was not completed in 2006. Meanwhile, the RSC normally writes to the railway company about issues that cause it concern, and expects the company to respond outlining the actions that it proposes.

No important warnings were issued during the year 2006.

**G.6. Complaints from IM('s) concerning RU('s)**

No complaints were received by the RSC related to conditions in the RU's Part A/Part B Certificate

**G.7. Complaints from RU('s) concerning IM('s)**

No complaints were received by the RSC related to conditions in the IM's authorisation

## **H. CONCLUSIONS – PRIORITIES – RESULTS OF SAFETY RECOMMENDATIONS**

### **H.1. Conclusion**

Our first year of operation as an independent agency operating within the European railway safety regulatory framework has been successful. While some elements of the framework have yet to be applied indications are that the transition from largely internal, to external, industry safety regulation will be achieved effectively and without undue conflict. Addressed in terms of international comparators and internal improvement our rail industry continues to perform well in safety terms. Areas where actions are needed have however been identified and we are working with undertakings and other stakeholders to address these.

### **H.2. Priorities**

To build further on our good industry safety record the following are our immediate organisational priorities:

- Build on our established working relationships with industry stakeholders to ensure the most effective implementation of the safety regulatory framework
- Work to ensure full transposition of EU legislation
- Address the serious resourcing and recruitment difficulties that we are experiencing and which are becoming increasingly critical.

### **H.3. Results of Safety Recommendations**

We continue to track duty holder implementation of recommendation deriving from investigation reports and from an ongoing processes of industry safety review that commenced in 1998. Our most effective tool for assessing the resultant benefits is an industry predictive model that indicates a steady reduction in safety risk since the process commenced.

## **Annexes**

ANNEX A: Railway Structure Information

ANNEX B: Organisation chart(s) of the National Safety Authority

ANNEX C: CSIs data – Definitions applied

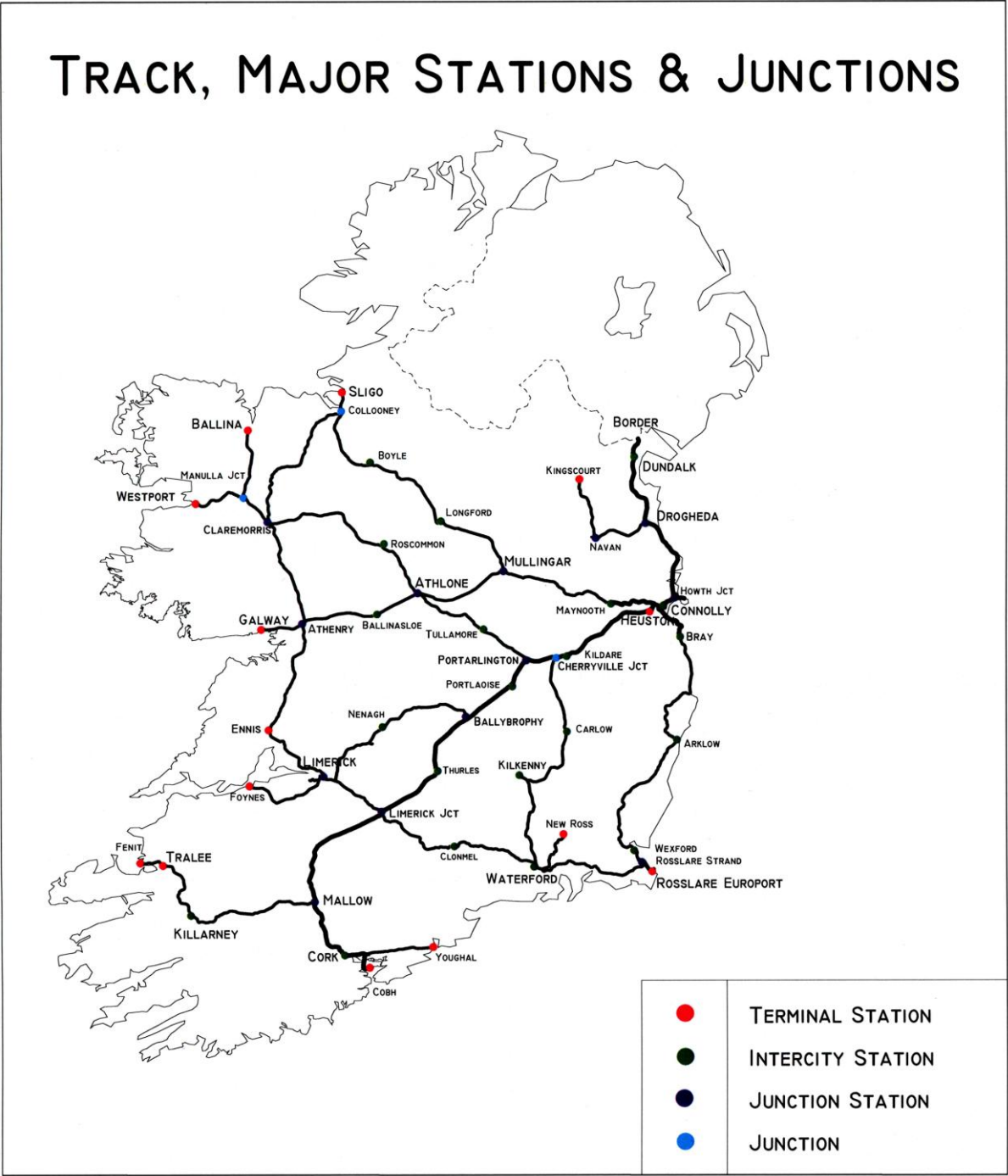
ANNEX D: Important changes in legislation and regulation

ANNEX E: The development of safety certification and authorisation – Numerical Data



ANNEX A: Railway Structure Information

A.1. Network map



## A.2. List of Railway Undertakings and Infrastructure Managers

### A.2.1. Infrastructure Manager(s)

<b>Name</b>	<b>Address</b>	<b>Website/Network Statement Link</b>	<b>Safety Authorisation (Number/ Date)</b>	<b>Start date commercial activity</b>	<b>Total Track Length/Gauge</b>	<b>Electrified Track Length/Voltages</b>	<b>Total Double/Simple Track Length</b>	<b>Total Track Length HSL</b>	<b>ATP equipment used</b>	<b>Number of LC</b>	<b>Number of Signals</b>
Iarnród Eireann	Connolly Station Amiens Street Dublin 1	<a href="http://www.irishrail.ie">www.irishrail.ie</a>			1919 km gauge 1603mm	97km 1500V(DC)	418 km/ 1059 km	none	CAWS , ATP	1688	3650

### A.2.2. Railway Undertaking(s)

<b>Name</b>	<b>Address</b>	<b>Website</b>	<b>Safety Certificate 2001/14/EC (Number/Date)</b>	<b>Safety Certificate A-B 2004/49/EC (Number/Date)</b>	<b>Start date commercial activity</b>	<b>Traffic Type (Freight,...)</b>	<b>Number of Locomotives</b>	<b>Number of Railcars/Multiple Unit-sets</b>	<b>Number of Coaches/Wagons</b>	<b>Number of train drivers/safety crew</b>	<b>Volume of passenger transport</b>	<b>Tonnes of freight transport</b>
Iarnród Eireann	Connolly Station Amiens Street Dublin 1	<a href="http://www.irishrail.ie">www.irishrail.ie</a>				Passenger, Freight	93	156 DMU/ 154 EMU	284 coaches/ 273 wagons		43.35 MLN	1.245 MLN tonne/1 92 MLN tonne- km

Abbreviations: HSL = High Speed Line (Definition acc. Directive 96/48/EC); ATP = Automatic Train Protection; LC = Level Crossing

## ANNEX B: Organisation chart(s) of the National Safety Authority

### B.1. Chart: Internal organisation

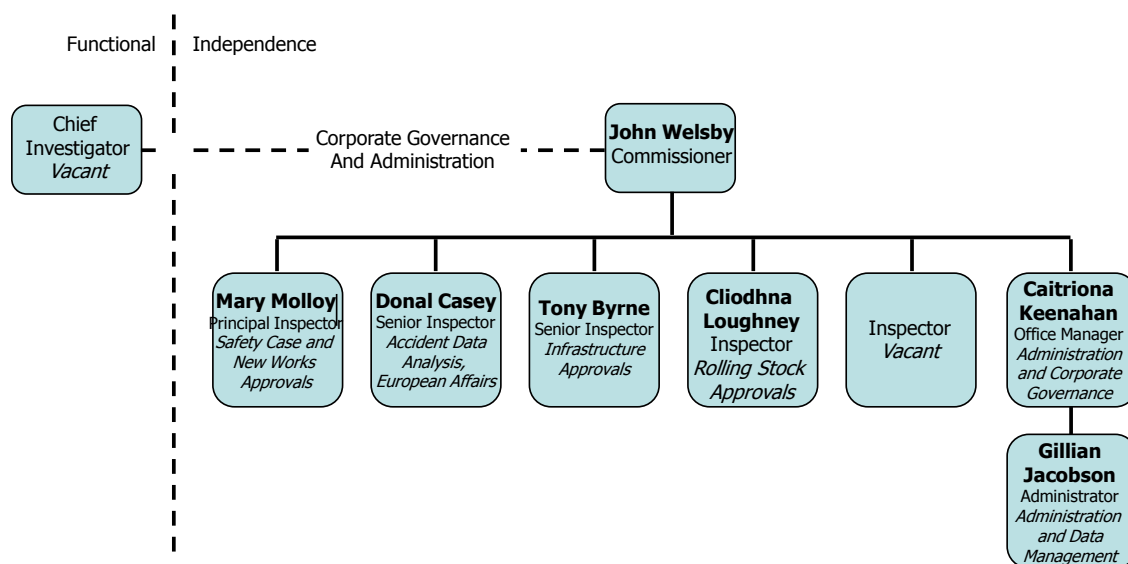
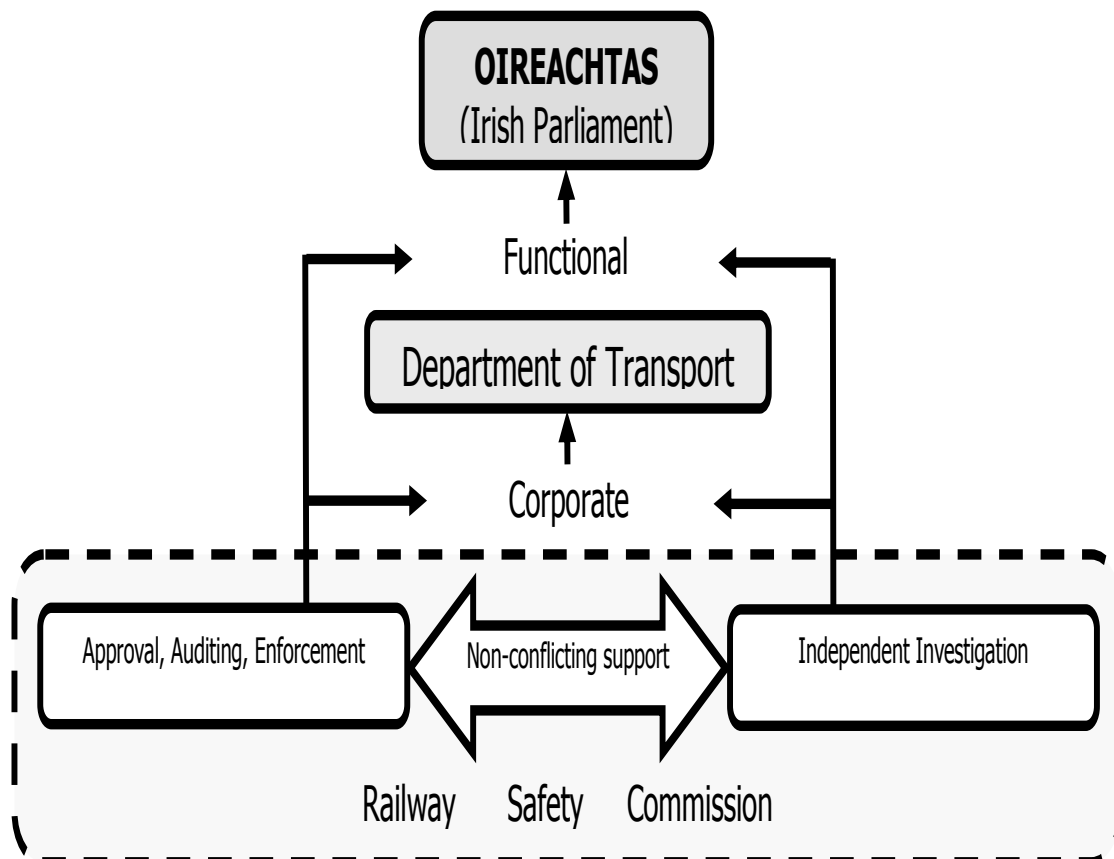


Figure 1: Organisational Chart for the Railway Safety Commission

## B.2. Chart: Relationship of NSA with other National Bodies



**Figure 2: flow & relationships between the Railway Safety Commission and other national bodies**

## ANNEX C: CSIs data – Definitions applied

### C.1. CSIs data

*Accidents, Fatalities and Injuries, by type and by category of people involved:*

#### National Data on railway accidents

Country:	IRELAND	IRELAND	Years:	Five year average: 2002-2006
Train*kilometer/ year:		16378600		
Passengertrain*kilometer/year:		12832600		
Passenger*kilometer:		1.69E+09		

IRELAND	Average annual N° of Accidents	Passengers		Employees		Level Crossing users		Unauthorised Persons on railway premises		Others	
		Fatalities	Serious Injuries	Fatalities	Serious Injuries	Fatalities	Serious Injuries	Fatalities	Serious Injuries	Fatalities	Serious Injuries
Five year average: 2002-2006											
Collisions of trains, including collisions with obstacles within the clearance gauge.	0.40	-	0.2	-	-	-	-	-	-	-	-
Derailments of trains	0.40	-	0.2	-	-	-	-	-	-	-	-
Level-crossing accidents, including accidents involving pedestrians at level crossings	0.40	0.2	-	-	-	0.2	-	-	-	-	-
Accidents to persons caused by rolling stock in motion, with the exception of suicides.	1.40	0.2	0.4	-	0.6	-	-	-	0.2	-	-
Accidents to persons involving rolling stock in motion, where suicide may have been a factor.	9.80	-	-	-	-	-	1.8	7.2	0.8	-	-
Fires in rolling stock	-	-	-	-	-	-	-	-	-	-	-
Others	0.40	-	0.200	-	-	-	-	-	-	-	-

*Normalised Data for Accidents, Fatalities and Injuries, by type and by category of people involved:*

IRELAND	Average annual N° of Accidents	Passengers		Passengers		Employees		Level Crossing		Unauthorised		Others	
		Fatalities/ BLN pass km	Serious Injuries/ BLN pass km	Fatalities/ MLN train km	Serious Injuries/ MLN train km	Fatalities/ MLN train km	Serious Injuries/ MLN train km	Fatalities/ MLN train km	Serious Injuries/ MLN train km	Fatalities/ MLN train km	Serious Injuries/ MLN train km	Fatalities/ MLN train km	Serious Injuries/ MLN train km
Five year average: 2002-2006													
Collisions of trains, including collisions with obstacles within the clearance gauge.	0.40	-	0.118	-	0.012	-	-	-	-	-	-	-	-
Derailments of trains	0.40	-	0.118	-	0.012	-	-	-	-	-	-	-	-
Level-crossing accidents, including accidents involving pedestrians at level crossings	0.40	0.118	-	0.012	-	-	-	0.012	-	-	-	-	-
Accidents to persons caused by rolling stock in motion, with the exception of suicides.	1.40	0.118	0.236	0.012	0.024	-	0.037	-	-	-	0.012	-	-
Accidents to persons involving rolling stock in motion, where suicide may have been a factor.	9.80	-	-	-	-	-	-	-	0.110	0.440	0.049	-	-
Fires in rolling stock	-	-	-	-	-	-	-	-	-	-	-	-	-
Others	0.40	-	0.118	-	0.012	-	-	-	-	-	-	-	-

**IRELAND**

		Per MLN train- km
<b>2006</b>	<b>AVG</b>	
Broken rails	8	0.44
Track buckles	5	0.27
Wrong-side signal failures	4	0.22
Signals Passed at Danger (including shunting signals)	35	1.92
Broken wheels	0	0.00
Broken axles	0	0.00

## **C.2. Definitions used in the annual report**

### **C.2.1. Definitions in Regulation 91/03 to be applied:**

#### ***deaths (killed person)***

means any person killed immediately or dying within 30 days as a result of an injury accident, excluding suicides

#### ***injuries (seriously injured person)***

means any person injured who was hospitalized for more than 24 hours as a result of an accident, excluding attempted suicides

#### **passenger-km**

means the unit of measure representing the transport of one passenger by rail over a distance of one kilometre. Only the distance on the national territory of the reporting country shall be taken into account

#### ***rail passenger***

means any person, excluding members of the train crew, who makes a trip by rail. For accident statistics, passengers trying to embark/disembark onto/from a moving train are included

#### **suicide**

means an act to deliberately injure oneself resulting in death, as recorded and classified by the competent national authority

#### **significant accident**

means any accident involving at least one rail vehicle in motion, resulting in at least one killed or seriously injured person, or in significant damage to stock, track, other installations or environment, or extensive disruptions to traffic. Accidents in workshops, warehouses and depots are excluded

#### ***train***

means one or more railway vehicles hauled by one or more locomotives or railcars, or one railcar traveling alone, running under a given number or specific designation from an initial fixed point to a terminal fixed point. A light engine, i.e. a locomotive traveling on its own, is not considered to be a train

#### **train-km**

means the unit of measure representing the movement of a train over one kilometre. The distance used is the distance actually run, if available, otherwise the standard network distance between the origin and destination shall be used. Only the distance on the national territory of the reporting country shall be taken into account

### **C.2.2. National definitions**

#### **Automatic level crossings:**

- AHB – Automatic half-barrier crossing
  - Provided with half barriers and steady yellow and flashing red lights for road traffic
  - Operate by passage of trains
- AHB-D – Automatic half-barrier crossing – distant monitored
  - As AHB above
  - Also provided with a Driver's white flashing light
- CCTV – Closed Circuit Television Crossing
  - Provided with full skirted barriers and steady yellow and flashing red lights, together with bells for road users
  - 
  - Provided with telephone giving communication with the supervising signal box
  - Supervised by Crossing keeper or Signaller from a remote location by use of CCTV (including operation of protecting signals)
  - Barriers can be operated by passage of trains or Crossing Keeper or Signaller
- LB – Lights and bells crossing
  - Open crossing (no gates or barriers)
  - Provided with steady yellow and flashing red lights, together with bells for road traffic
  - Operated by passage of trains
- ML or MWL – Miniature lights
  - Provided with user-worked gates and miniature red and green warning lights for crossing users
  - Warning lights operated by passage of trains

#### **Manned level crossings:**

- MB – Manual barrier crossing
  - Provided with full barriers and steady yellow and flashing red lights, together with bells for road users
  - Operated (together with protecting signals) by Crossing Keeper or Signaller or by the traincrew
- MWB – Mechanically Worked Barrier Crossing
  - Provided with full barriers (no lights or bells)
  - Operated by a Crossing Keeper or traincrew
- GATED – (See designations below)
  - Provided with gates extending across the line when the crossing is open to road traffic
  - The following designation applies according to whether the gates are required to be kept normally open or normally closed to road traffic:



- ❖ C – Gates normally CLOSED to road traffic
  - ❖ CX – gates normally OPEN to road traffic
  - ❖ CD – gates normally OPEN to road traffic by DAY and normally closed at other times
  - ❖ CN – gates normally OPEN to road traffic by NIGHT and normally closed at other times.
- A – Attended crossing
    - As Unattended crossing (below) except that the gates are operated by a Crossing Keeper

### **Passive level crossings:**

- U – Unattended crossing
  - Provided with gates not extending across the line
  - Operated by crossing users
  - Gates normally CLOSED to crossing users
- B- Barrow crossing
  - May be provided with white warning light operated by passage of trains
- F – Field crossing
  - Provided with gates not extending across the line
  - Operated by crossing users
  - Gates normally CLOSED to crossing users

### **Suspicious circumstances:**

Accidents with circumstances that would normally be investigated by the police, rather than the NIB.

### **C.3. Abbreviations**

CSI	Common Safety Indicator
IÉ	Iarnród Éireann – Irish Rail
ERA	European Railway Agency
LC	Level Crossing
MLN	10 <sup>6</sup>
BLN	10 <sup>9</sup>
NIB	National Investigating Body for railway accidents
NSA	Network Safety Authorities
RS	Rolling Stock
RSC	Railway Safety Commission
RU/IM	Railway Undertaking and Infrastructure Manager

## ANNEX D: Important changes in legislation and regulation

<b>Annual Report</b>	
<b>General national railway safety legislation</b>	
Legislation concerning the national safety authority	Change of scope, tasks, responsibility, competence, etc
Legislation concerning notified bodies, assessors, third parties bodies for registration, examination, etc.	Change of scope, tasks, responsibility, competence, etc
<b>National rules concerning railway safety</b>	
Rules concerning national safety targets and methods	New or change of requirements including the implementation of CSMs and CSTs
Rules concerning requirements for safety management systems and safety certification of railway undertakings	New or change of requirements including the implementation of requirements from the Safety Directive
Rules concerning requirements for safety management systems and safety authorisation of infrastructure managers	New or change of requirements including the implementation of requirements from the Safety Directive
Rules concerning requirements for wagonkeepers	New or change of requirements including the implementation of EU legislation
Rules concerning requirements for maintenance workshops	New or change of requirements including the implementation of EU legislation
Rules concerning requirements for the authorisation of placing in service and maintenance of new and substantially altered rolling stock, including rules for exchange of rolling stock between railway undertakings, registration systems and requirements on testing procedures	New or change of requirements including the implementation of EU legislation; e.g. TSIs, RID
Common operating rules of the railway network including rules relating to the signalling and traffic procedures	New or change of requirements including the implementation of EU legislation; e.g. TSIs, RID
Rules setting out requirements for additional internal operating rules (company rules) that must be established by the infrastructure managers and railway undertakings	New or change of requirements including the implementation of EU legislation; e.g. TSIs, RID
Rules concerning requirements for staff executing safety critical tasks, including selection criteria, medical fitness and vocational training and certification	New or change of requirements including the implementation of EU legislation; e.g. TSIs, RID
Rules concerning the investigation of the accident and incidents including recommendation	New or change of requirements including the implementation of requirements from the Safety Directive
Rules concerning requirements for national safety indicators including how to collect and analyse the indicators	New or change of requirements including the implementation of requirements from the Safety Directive
Rules concerning requirements for authorisation of placing in service the infrastructure (tracks, bridges, tunnels, energy, ATC, radio, signalling, interlocking, level crossing, platforms, etc.)	New or change of requirements including the implementation of EU legislation; e.g. TSIs

<b><i>General national railway safety legislation</i></b>	<b><i>Legal reference</i></b>	<b><i>Date legislation comes into force</i></b>	<b><i>Reason for introduction (specify new law or amendment to existing legislation)</i></b>	<b><i>Description</i></b>
Legislation concerning the national safety authority	Railway Safety Act 2005 (No. 31 of 2005)	18 December 2005	New legislation to establish regulatory framework for safety of railways in Ireland and to implement principal provisions of the Railway Safety Directive 2004/49/EC, and to make amendments to existing legislation concerning railway undertakings and railway regulation.	The new legislation establishes National Safety Authority and sets out requirements for safety management systems and safety case to be assessed and accepted by the NSA. It also establishes an Investigating Body and sets the framework for reporting and investigating of accidents, as well as general and specific requirements for all parties regarding safe operation and working on the railway, and offences in that regard.
Legislation concerning notified bodies, assessors, third parties bodies for registration, examination, etc.	Railway Safety Act 2005 (No. 31 of 2005)	18 December 2005	To establish regulatory framework for safety of railways in Ireland, and to implement principal provisions of the Railway Safety Directive 2004/49/EC, and to make amendments to existing legislation concerning railway undertakings and railway regulation.	The new legislation establishes National Safety Authority and sets out requirements for safety management systems and safety case to be assessed and accepted by the NSA. It also establishes an Investigating Body and sets the framework for reporting and investigating of accidents, as well as general and specific requirements for all parties regarding safe operation and working on the railway, and offences in that regard.

<i>National rules concerning railway safety</i>	<i>Legal reference</i>	<i>Date legislation comes into force</i>	<i>Reason for introduction (specify new law or amendment to existing legislation)</i>	<i>Description</i>
Rules concerning national safety targets and methods	NONE			
Rules concerning requirements on safety management systems and safety certification of Railway Undertakings	<p>Railway Safety Act 2005 (No. 31 of 2005) Part 4 Safety Management Systems and Safety Case</p> <p>SI No. 215 of 2006 Railway Safety Act 2005 (Section 5 and Parts 4, 9 and 10)(Commencement) Order 2006</p>	<p>18 December 2005</p> <p>25 April 2006</p>	<p>New legislation to provide for R.U.s and I.M.s to implement safety management systems and prepare safety case for submission to NSA for certification, and thereby implement key requirements of Safety Directive in respect of Safety Management Systems and Safety Certification.</p> <p>To specify date for coming into effect of Part 4 of the Railway Safety Act 2005 regarding Safety Management Systems and Safety Case</p>	Part 4 describes: objectives and components of safety case describing safety management systems; procedures for preparation and submission to the NSA; cooperation between R.U.s/I.M.s regarding safety case and acceptance of safety certification issued by other MS; assessment of new works and new rolling stock; procedures for transfer of ownership/revision of safety case; procedures for NSA acceptance, assessment and audit of safety case; and related matters.
Rules concerning requirements on safety management systems and Safety Authorisation of Infrastructure Managers	<p>Railway Safety Act 2005 (No. 31 of 2005) Part 4 Safety Management Systems and Safety Case</p> <p>SI No. 215 of 2006 Railway Safety Act 2005 (Section 5 and Parts 4, 9 and 10)(Commencement) Order 2006</p>	<p>18 December 2005</p> <p>25 April 2006</p>	<p>New legislation to provide for R.U.s and I.M.s to implement safety management systems and prepare safety case for submission to NSA for certification, and thereby implement key requirements of Safety Directive in respect of Safety Management Systems and Safety Certification.</p> <p>To specify date for coming into effect of Part 4 of the Railway Safety Act 2005 regarding Safety Management Systems and Safety Case</p>	Part 4 describes: objectives and components of safety case describing safety management systems; procedures for preparation and submission to the NSA; cooperation between R.U.s/I.M.s regarding safety case and acceptance of safety certification issued by other MS; assessment of new works and new rolling stock; procedures for transfer of ownership/revision of safety case; procedures for NSA acceptance, assessment and audit of safety case; and related matters.

<b><i>National rules concerning railway safety (continued)</i></b>	<b><i>Legal reference</i></b>	<b><i>Date legislation comes into force</i></b>	<b><i>Reason for introduction (specify new law or amendment to existing legislation)</i></b>	<b><i>Description</i></b>
Rules concerning requirements for wagon keepers	NONE			
Rules concerning requirements for maintenance workshops	NONE			
Rules concerning requirements for the authorisation of placing in service and maintenance of new and substantially altered rolling stock, including rules for exchange of rolling stock between Railway Undertakings, registration systems and requirements on testing procedures	Section 43 of Railway Safety Act 2005  SI No. 215 of 2006 Railway Safety Act 2005 (Section 5 and Parts 4, 9 and 10)(Commencement) Order 2006	18 December 2005  25 April 2006	New legislation to provide for assessment and acceptance of new rolling stock (including rolling stock materially altered) by the NSA under safety case system.  To specify date for coming into effect of Part 4 of the Railway Safety Act 2005 (including Section 43)	
Common operating rules of the railway network, including rules relating to the signalling and traffic procedures	Section 5 of Railway Safety Act 2005	18 December 2005	To repeal Section 22 of the Regulation of Railways Act 1868	Repeals provisions relating to requirements for passenger communications with train crew and penalties in that regard.
	Section 5 of Railway Safety Act 2005	18 December 2005	To repeal Railway Returns (Continuous Brakes) Act 1878	Repeals requirement for Railway Company to report on use of continuous brakes.
	Section 5 of Railway Safety Act 2005	18 December 2005	To repeal Section 9 of the Transport Act 1958	Repeal removes certain powers of the Minister of Transport in relation to control of level crossings.
	Section 5 of Railway Safety Act 2005	18 December 2005	To repeal Section 22 of the Transport (Miscellaneous Provisions) Act 1971	Repeal removes certain powers of the Minister of Transport in relation to control of level crossings.
<b><i>National rules concerning railway safety (continued)</i></b>	<b><i>Legal reference</i></b>	<b><i>Date legislation comes into force</i></b>	<b><i>Reason for introduction (specify new law or amendment to existing legislation)</i></b>	<b><i>Description</i></b>

Rules laying down requirements on additional internal operating rules (company rules) that must be established by the Infrastructure Managers and Railway Undertakings	Section 5 of the Railway Safety Act 2005	18 December 2005	Repeals section 11(1)(b) of the Transport (Railway Infrastructure) Act 2001	Repeal removes obligation on Railway Procurement Agency to monitor and publish reports on safety of light rail and metro infrastructure.
Rules concerning requirements on staff executing safety critical tasks, including selection criteria, medical fitness and vocational training and certification	Section 37 of the Railway Safety Act 2005	18 December 2005	New legislation to apply general duty of care on persons working on railways and other persons	
	Parts 9 and 10 of Railway Safety Act 2005	25 April 2006	New legislation specifying duties of safety critical workers and R.U.s/I.M.s with regard to: intoxicants, testing for intoxicants and offences in that regard; careless or dangerous working on the railway; medical fitness for duty.	
	SI No. 215 of 2006 Railway Safety Act 2005 (Section 5 and Parts 4, 9 and 10)(Commencement) Order 2006	25 April 2006	To specify date for coming into effect of Parts 9 and 10 of the Railway Safety Act 2005 regarding Intoxicants and Persons Working on RailwayInfrastructure	
	Section 5 of Railway Safety Act 2005	18 December 2005	To repeal Section 29 of the Transport (Miscellaneous Provisions) Act 1971	
	Section 5 of Railway Safety Act 2005	18 December 2005	To repeal section 55 of the Transport (Railway Infrastructure) Act 2001	Repeal removes requirement for regulations to provide for medical examination of locomotive drivers.
				Repeal has effect of removing provisions of previous legislation in relation to driving while unfit or under influence of intoxicants that apply to drivers of light rail vehicles.

<i>National rules concerning railway safety (continued)</i>	<i>Legal reference</i>	<i>Date legislation comes into force</i>	<i>Reason for introduction (specify new law or amendment to existing legislation)</i>	<i>Description</i>
Rules concerning the investigation of the accident and incidents including recommendation	Part 5 of Railway Safety Act 2005	18 December 2005	New legislation to implement main elements of Articles 19 - 25 of the Railway Safety Directive 2004/49/EC regarding accident and incident investigation and reporting.	The new legislation specifies different classes of reportable railway incidents; provides for reporting and investigation of incidents by R.U.s and staff of R.U.s and contractors; provides for the establishment of the Investigation Body, investigations of the Investigation Body and reporting requirements; and specifies requirements in relation to report recommendations and response to recommendations.
	SI No. 585 of 2006 Railway Safety Act 2005 (Railway Incidents) Regulations 2006	23 November 2006	New legislation to give effect to certain provisions in the Railway Safety Act 2005 and to Article 19 of Directive 2004/49/EC. Cccccccccc	Specifies the classes of incidents which shall be investigated by the Investigation Body and the R.U., and defines serious accidents to be investigated by the Investigation Body
	Section 5 of Railway Safety Act 2005	18 December 2005	Repeals sections 3,4,5,6 and 7 of the Regulation of Railways Act 1871	Repeals legislation governing previous regime for inspection of railways and investigation into accidents.
	Section 5 of Railway Safety Act 2005	18 December 2005	Repeals Section 13(2) of Railway Employment (Prevention of Accidents) Act 1900	Repeals duty of Railway Company to give notification of accidents to workers in certain conditions.
	Section 5 of Railway Safety Act 2005	18 December 2005	Repeals sections 58(2), (3), and (5) of Railway Act 1924	Repeals certain powers of Minister of Transport in relation to investigations into accidents and recommendations of report into accidents.

<i>National rules concerning railway safety (continued)</i>	<i>Legal reference</i>	<i>Date legislation comes into force</i>	<i>Reason for introduction (specify new law or amendment to existing legislation)</i>	<i>Description</i>
Rules concerning requirements for national safety indicators including how to collect and analyse the indicators	NONE			
Rules concerning requirements for authorisation of placing in service the infrastructure (tracks, bridges, tunnels, energy, ATC, radio, signalling, interlocking, level crossing, platforms, etc.)	Section 42 of Railway Safety Act 2005	18 December 2005	New legislation providing for authorisation by NSA of new works	Details duties procedures for RU/IM in implementing and bringing new works into service and duties and procedures for NSA assessment and authorisation of same.
	Section 5 of Railway Safety Act 2005	18 December 2005	To repeal Sections 4, 5, 6 and 11 of Regulation of Railways Act 1842	Repeal has effect that Minister of Transport approval for new works no longer required.
	Section 5 of Railway Safety Act 2005	18 December 2005	To repeal Section 58(4)	Repeal has effect that Minister of Transport approval for certain specified new works no longer required.
	Section 5 of Railway Safety Act 2005	18 December 2005	To repeal section 51 of the Transport (Railway Infrastructure) Act 2001	Repeal has effect that Minister of Transport role in safety approval of new railways is removed.



## ANNEX E: The development of safety certification and authorisation – Numerical Data

### E.1. Safety Certificates according to Directive 2001/14/EC

Number of Safety Certificates issued according to Directive 2001/14/EC, held by Railway Undertakings in year 20xx being licensed	in your Member State	None
	in another Member State	None

### E.2. Safety Certificates according to Directive 2004/49/EC

		New	Updated / amended	Renewed
E.2.1. Number of valid Safety Certificates <b>Part A</b> held by Railway Undertakings in the year 20xx being registered	in your Member State	None	None	None
	in another Member State	None	None	None

		New	Updated / amended	Renewed
E.2.2. Number of valid Safety Certificates <b>Part B</b> held by Railway Undertakings in the year 20xx being registered	in your Member State	None	None	None
	in another Member State	None	None	None

			A	R	P
E.2.3. Number of applications for Safety Certificates <b>Part A</b> submitted by Railway Undertakings in year 20xx being registered	in your Member State for	new certificates	0	0	1
		updated / amended certificates	0	0	0
		renewed certificates	0	0	0
	in another Member State for	new certificates	0	0	0
		updated / amended certificates	0	0	0
		renewed certificates	0	0	0

			A	R	P
E.2.4. Number of applications for Safety Certificates <b>Part B</b> submitted by Railway Undertakings in year 20xx being registered	in your Member State for	new certificates	0	0	1
		updated / amended certificates	0	0	0
		renewed certificates	0	0	0
	in another Member State for	new certificates	0	0	0
		updated / amended certificates	0	0	0
		renewed certificates	0	0	0

A = Accepted application, certificate is already issued

R = Rejected applications, no certificate was issued

P = Case is still pending, no certificate was issued so far

E.2.5. List of countries where RUs applying for a Safety Certificate Part B in your Member State have obtained their Safety Certificate Part A:

### E.3. Safety Authorisations according to Directive 2004/49/EC

	New	Updated / amended	Renewed
E.3.1. Number of valid Safety Authorisations held by Infrastructure Managers in the year 20xx being registered in your Member State	0	0	0

		A	R	P
E.3.2. Number of applications for Safety Authorisations submitted by Infrastructure Managers in year 20xx being registered in your Member State	new authorisations	0	0	1
	updated / amended authorisations	0	0	0
	renewed authorisations	0	0	0

A = Accepted application, authorisation is already issued

R = Rejected applications, no authorisation was issued

P = Case is still pending, no authorisation was issued so far

### E.4. Procedural aspects – Safety Certificates part A

		New	Updated / amended	Renewed
Mean time after having received all necessary information between the receipt of an application and the final delivery of a Safety	a licence released by your Member State			
	a licence released by			

Certificate <b>Part A</b> in year 20xx for Railway Undertakings holding	another Member State			
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#### E.5. Procedural aspects – Safety Certificates part B

		New	Updated / amended	Renewed
Mean time after having received all necessary information between the receipt of an application and the final delivery of a Safety Certificate <b>Part B</b> in year 20xx for Railway Undertakings holding	a licence released by your Member State?			
	a licence released by another Member State?			

#### E.6. Procedural aspects – Safety Authorisations

		New	Updated / amended	Renewed
Mean time after having received all necessary information between the receipt of an application and the final delivery of a Safety Authorisation in year 20xx for Infrastructure Managers holding	a licence released by your Member State			
	a licence released by another Member State			